

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P565139

Luminaire Tested: **SQ4-PW1-150U-075D-935-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565139
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-075D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

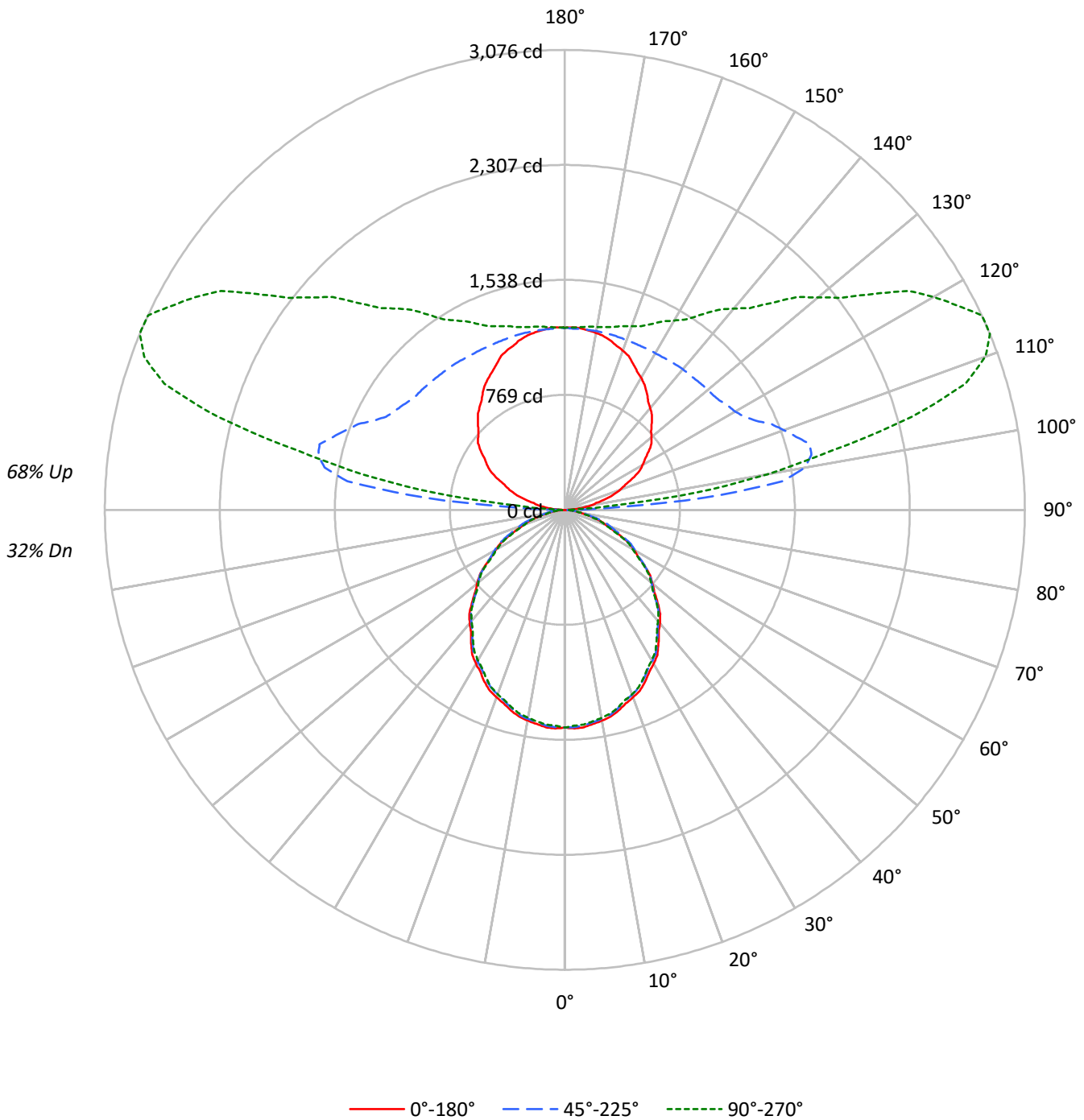
Lumens per Lamp: N/A
Luminaire Lumens: 11557.5 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 97.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 73 | 73 | 73 | 56 | 56 | 56 | 40 | 40 | 40 | 32 |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 64 | 62 | 60 | 49 | 48 | 46 | 35 | 34 | 34 | 27 |
| 2 | 85 | 78 | 72 | 67 | 77 | 71 | 66 | 61 | 56 | 53 | 50 | 43 | 41 | 39 | 31 | 30 | 28 | 23 |
| 3 | 78 | 69 | 62 | 56 | 70 | 62 | 56 | 51 | 50 | 45 | 42 | 38 | 35 | 33 | 27 | 26 | 24 | 19 |
| 4 | 71 | 61 | 53 | 47 | 64 | 55 | 48 | 43 | 44 | 39 | 36 | 34 | 31 | 28 | 25 | 22 | 21 | 17 |
| 5 | 65 | 54 | 46 | 40 | 59 | 49 | 42 | 37 | 39 | 34 | 31 | 30 | 27 | 24 | 22 | 20 | 18 | 14 |
| 6 | 60 | 48 | 41 | 35 | 54 | 44 | 37 | 32 | 35 | 30 | 27 | 27 | 24 | 21 | 20 | 18 | 16 | 13 |
| 7 | 55 | 44 | 36 | 30 | 50 | 40 | 33 | 28 | 32 | 27 | 23 | 25 | 21 | 19 | 18 | 16 | 14 | 11 |
| 8 | 51 | 39 | 32 | 27 | 46 | 36 | 29 | 25 | 29 | 24 | 21 | 23 | 19 | 17 | 17 | 14 | 13 | 10 |
| 9 | 48 | 36 | 29 | 24 | 43 | 33 | 26 | 22 | 27 | 22 | 18 | 21 | 17 | 15 | 15 | 13 | 11 | 9 |
| 10 | 44 | 33 | 26 | 21 | 40 | 30 | 24 | 20 | 24 | 20 | 16 | 19 | 16 | 13 | 14 | 12 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8954 | 8954 | 8954 |
| 5° | 9012 | 8940 | 8901 |
| 10° | 8939 | 8868 | 8820 |
| 15° | 8845 | 8747 | 8714 |
| 20° | 8740 | 8605 | 8588 |
| 25° | 8617 | 8461 | 8434 |
| 30° | 8435 | 8308 | 8253 |
| 35° | 8196 | 8080 | 8032 |
| 40° | 7940 | 7817 | 7785 |
| 45° | 7631 | 7530 | 7497 |
| 50° | 7315 | 7253 | 7204 |
| 55° | 6974 | 6974 | 6863 |
| 60° | 6548 | 6674 | 6437 |
| 65° | 5992 | 6290 | 5842 |
| 70° | 5282 | 5789 | 5143 |
| 75° | 4511 | 5181 | 4389 |
| 80° | 3500 | 4360 | 3542 |
| 85° | 2265 | 3352 | 2985 |



TEST NUMBER: P565139

CATALOG NUMBER: SQ4-PW1-150U-075D-935-1D-UNV-STD-W-6

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 137.1 | 1.2 |
| 10°-20° | 387.0 | 3.3 |
| 20°-30° | 574.1 | 5.0 |
| 30°-40° | 671.7 | 5.8 |
| 40°-50° | 668.7 | 5.8 |
| 50°-60° | 577.5 | 5.0 |
| 60°-70° | 415.7 | 3.6 |
| 70°-80° | 218.0 | 1.9 |
| 80°-90° | 56.6 | 0.5 |
| 90°-100° | 565.9 | 4.9 |
| 100°-110° | 1530.2 | 13.2 |
| 110°-120° | 1608.7 | 13.9 |
| 120°-130° | 1306.7 | 11.3 |
| 130°-140° | 1025.0 | 8.9 |
| 140°-150° | 786.7 | 6.8 |
| 150°-160° | 565.8 | 4.9 |
| 160°-170° | 345.6 | 3.0 |
| 170°-180° | 116.5 | 1.0 |
| 0°-30° | 1098.1 | 9.5 |
| 0°-40° | 1769.9 | 15.3 |
| 0°-60° | 3016.0 | 26.1 |
| 0°-90° | 3706.3 | 32.1 |
| 90°-120° | 3704.8 | 32.1 |
| 90°-150° | 6823.3 | 59.0 |
| 90°-180° | 7851.0 | 67.9 |
| 0°-180° | 11557.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1456 | 1456 | 1456 | 1456 | 1456 | |
| 5° | 1460 | 1443 | 1448 | 1444 | 1442 | 138 |
| 15° | 1389 | 1372 | 1374 | 1371 | 1368 | 392 |
| 25° | 1270 | 1248 | 1247 | 1239 | 1243 | 584 |
| 35° | 1092 | 1076 | 1076 | 1066 | 1070 | 682 |
| 45° | 877 | 870 | 866 | 863 | 862 | 677 |
| 55° | 650 | 649 | 650 | 641 | 640 | 580 |
| 65° | 412 | 424 | 432 | 415 | 401 | 408 |
| 75° | 190 | 207 | 218 | 204 | 185 | 203 |
| 85° | 32 | 42 | 48 | 45 | 42 | 42 |
| 90° | 3 | 8 | 17 | 18 | 17 | 7 |
| 95° | 88 | 308 | 941 | 487 | 290 | 92 |
| 105° | 284 | 440 | 1698 | 2504 | 2401 | 300 |
| 115° | 501 | 612 | 1408 | 2725 | 3076 | 494 |
| 125° | 686 | 786 | 1269 | 2141 | 2515 | 611 |
| 135° | 822 | 919 | 1235 | 1729 | 1957 | 635 |
| 145° | 956 | 1027 | 1218 | 1480 | 1593 | 598 |
| 155° | 1079 | 1121 | 1207 | 1328 | 1371 | 498 |
| 165° | 1174 | 1186 | 1212 | 1260 | 1266 | 331 |
| 175° | 1219 | 1218 | 1214 | 1230 | 1227 | 116 |
| 180° | 1218 | 1218 | 1218 | 1218 | 1218 | |



TEST NUMBER: P565139

CATALOG NUMBER: SQ4-PW1-150U-075D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1455.7 | 1455.7 | 1455.7 | 1455.7 | 1455.7 |
| 2.5° | 1463.9 | 1451.9 | 1455.7 | 1452.5 | 1445.5 |
| 5° | 1459.6 | 1443.3 | 1448.0 | 1444.1 | 1441.6 |
| 7.5° | 1444.7 | 1429.6 | 1433.1 | 1429.0 | 1427.5 |
| 10° | 1431.3 | 1416.3 | 1419.8 | 1414.6 | 1412.1 |
| 12.5° | 1416.0 | 1399.9 | 1403.4 | 1398.2 | 1396.7 |
| 15° | 1389.0 | 1371.5 | 1373.6 | 1371.0 | 1368.5 |
| 17.5° | 1357.7 | 1339.9 | 1340.3 | 1336.2 | 1335.7 |
| 20° | 1335.2 | 1316.3 | 1314.6 | 1309.6 | 1312.1 |
| 22.5° | 1310.5 | 1290.7 | 1289.0 | 1281.9 | 1285.4 |
| 25° | 1269.7 | 1248.4 | 1246.7 | 1239.0 | 1242.8 |
| 27.5° | 1222.5 | 1201.5 | 1201.5 | 1190.8 | 1194.8 |
| 30° | 1187.7 | 1167.6 | 1169.7 | 1157.0 | 1162.0 |
| 32.5° | 1150.7 | 1132.7 | 1133.8 | 1121.1 | 1126.1 |
| 35° | 1091.5 | 1076.4 | 1076.1 | 1065.9 | 1069.7 |
| 37.5° | 1030.9 | 1017.6 | 1015.5 | 1009.7 | 1010.7 |
| 40° | 988.9 | 977.6 | 973.5 | 969.6 | 969.6 |
| 42.5° | 944.7 | 934.5 | 930.4 | 927.5 | 926.5 |
| 45° | 877.3 | 869.8 | 865.7 | 863.1 | 861.9 |
| 47.5° | 810.6 | 803.6 | 800.1 | 798.2 | 797.0 |
| 50° | 764.4 | 759.4 | 758.0 | 754.1 | 752.9 |
| 52.5° | 718.2 | 715.2 | 713.9 | 709.0 | 707.7 |
| 55° | 650.3 | 649.0 | 650.3 | 641.3 | 640.0 |
| 57.5° | 579.5 | 581.5 | 585.6 | 573.5 | 570.5 |
| 60° | 532.3 | 537.3 | 542.5 | 528.3 | 523.3 |
| 62.5° | 484.0 | 492.1 | 499.4 | 483.1 | 476.1 |
| 65° | 411.7 | 424.2 | 432.2 | 415.2 | 401.4 |
| 67.5° | 341.9 | 357.5 | 367.1 | 348.8 | 333.2 |
| 70° | 293.7 | 311.3 | 321.9 | 303.6 | 286.0 |
| 72.5° | 251.6 | 271.2 | 279.9 | 262.5 | 245.0 |
| 75° | 189.8 | 207.4 | 218.0 | 203.5 | 184.7 |
| 77.5° | 134.7 | 151.2 | 160.1 | 147.4 | 131.8 |
| 80° | 98.8 | 116.3 | 123.1 | 112.6 | 100.0 |
| 82.5° | 70.0 | 84.6 | 89.3 | 82.9 | 74.4 |
| 85° | 32.1 | 42.1 | 47.5 | 44.8 | 42.3 |
| 87.5° | 8.7 | 16.8 | 22.9 | 23.2 | 23.9 |
| 90° | 2.6 | 7.7 | 17.0 | 18.3 | 17.0 |
| 92.5° | 37.2 | 135.7 | 267.7 | 116.2 | 84.2 |
| 95° | 87.8 | 308.3 | 941.2 | 487.1 | 289.7 |
| 97.5° | 141.0 | 353.5 | 1467.1 | 1214.1 | 891.6 |
| 100° | 180.9 | 371.9 | 1630.7 | 1700.6 | 1375.0 |
| 102.5° | 217.6 | 397.3 | 1688.3 | 2069.5 | 1826.0 |
| 105° | 284.4 | 439.5 | 1697.5 | 2503.9 | 2401.4 |
| 107.5° | 346.3 | 487.8 | 1623.3 | 2775.0 | 2809.1 |
| 110° | 394.6 | 522.7 | 1557.2 | 2847.8 | 2992.6 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 437.5 | 557.5 | 1496.4 | 2833.2 | 3076.5 |
| 115° | 500.7 | 612.2 | 1407.8 | 2725.3 | 3076.5 |
| 117.5° | 562.6 | 667.2 | 1349.4 | 2560.4 | 2958.5 |
| 120° | 600.4 | 702.9 | 1314.7 | 2442.1 | 2848.4 |
| 122.5° | 636.0 | 736.5 | 1293.8 | 2315.3 | 2724.7 |
| 125° | 685.6 | 785.5 | 1268.9 | 2141.2 | 2515.4 |
| 127.5° | 731.2 | 829.3 | 1254.2 | 1999.1 | 2328.3 |
| 130° | 756.3 | 857.6 | 1247.9 | 1911.4 | 2208.7 |
| 132.5° | 782.6 | 882.8 | 1241.6 | 1832.2 | 2106.0 |
| 135° | 821.9 | 919.3 | 1234.8 | 1728.9 | 1957.0 |
| 137.5° | 861.5 | 953.5 | 1229.0 | 1645.1 | 1830.9 |
| 140° | 888.7 | 974.6 | 1226.9 | 1591.2 | 1756.5 |
| 142.5° | 914.9 | 995.7 | 1222.7 | 1542.4 | 1687.3 |
| 145° | 955.6 | 1027.4 | 1217.7 | 1479.8 | 1592.6 |
| 147.5° | 992.5 | 1056.1 | 1212.0 | 1423.2 | 1509.8 |
| 150° | 1019.8 | 1076.2 | 1209.9 | 1392.3 | 1461.6 |
| 152.5° | 1045.0 | 1094.2 | 1208.8 | 1363.8 | 1420.7 |
| 155° | 1078.8 | 1121.1 | 1207.3 | 1327.5 | 1371.1 |
| 157.5° | 1113.9 | 1143.4 | 1207.5 | 1302.3 | 1331.0 |
| 160° | 1133.9 | 1158.2 | 1208.6 | 1286.4 | 1306.9 |
| 162.5° | 1149.6 | 1169.8 | 1209.6 | 1273.7 | 1289.1 |
| 165° | 1174.5 | 1186.0 | 1212.5 | 1259.8 | 1266.2 |
| 167.5° | 1191.5 | 1199.5 | 1212.8 | 1248.0 | 1251.0 |
| 170° | 1202.0 | 1205.9 | 1213.8 | 1242.7 | 1242.7 |
| 172.5° | 1210.4 | 1211.2 | 1213.8 | 1236.3 | 1235.3 |
| 175° | 1219.1 | 1217.8 | 1213.8 | 1229.5 | 1226.9 |
| 177.5° | 1221.9 | 1218.9 | 1213.6 | 1224.0 | 1220.9 |
| 180° | 1217.7 | 1217.7 | 1217.7 | 1217.7 | 1217.7 |

(END OF REPORT)